

**TORQUE-BASED OCCUPANT WEIGHT
ESTIMATION APPARATUS FOR A VEHICLE SEAT**

Abstract of the Disclosure

A torque-based occupant weight estimation apparatus for a vehicle seat includes front and rear torsion bars through which the seat frame is coupled to a set of floor brackets. The torsion bars are rotatably mounted on the floor

5 brackets, and linkage arms rigidly coupled to opposing ends of each torsion bar are rotatably coupled to the seat frame so as to convert occupant seat weight into torsion bar torque. Torque sensors coupled to the torsion bars provide an indication of occupant weight.